



KEEPING YOUR FACILITY UP TO SPEED
— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

Job Number 104135

Prepared for Rogers Group (01189502)

1032 Hwy 5
Cabot AR 72023

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AC Inspection as Found - *LR MOTOR SHOP*

AC Inspection - Rev. 2: *TYPE-YE3-132S2-2*

1.0

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Printed on 2/14/2025

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Hi-Speed Industrial Service
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Millington, Tn 38053
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AC Inspection as Found

Rogers Group (01189502)

1032 Hwy 5
Cabot, AR 72023

FolderID: 104135
FormID: 23365875

AC Inspection - Rev. 2

Location: LR MOTOR SHOP

Serial Number: TYPE-YE3-132S2-2

Description: BARMESA MOTOR W PUMP
PUMP SER# N2203240158-004

Hi-Speed Job Number:	104135
Manufacturer:	Other
Product Number:	ZU2204190026
Serial Number:	TYPE-YE3-132S2-2
RPM:	3500 (RPM)
Voltage:	230 / 460
Current:	23.7/11.85 (Amps)
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: ● 2 - High ● 11 - Good

Overall Condition

1. Report Date

02/14/2025

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2. Nameplate Picture



3. Photos of all six sides of the machine.



4. Describe the Overall Condition of the Equipment as Received

Serviceable

Initial Mechanical/Electrical

5. Does Shaft Turn Freely?	(Y) Yes
6. Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
7. Does Shaft Have Visible Damage?	(No) No
8. Assembled Shaft Runout	0 Inches

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9. Assembled Shaft End Play	0 inches
10. Air Gap Variation <10%	na
● 11. Lead Condition	(P) Pass
12. Lead Length	12 Inches
● 13. Does it have Lugs?, If so what is the Stud Size?	(Yes) Yes



14. Lead Numbers	1-9
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● 15. Frame Condition	(P) Pass
● 16. Fan Condition	



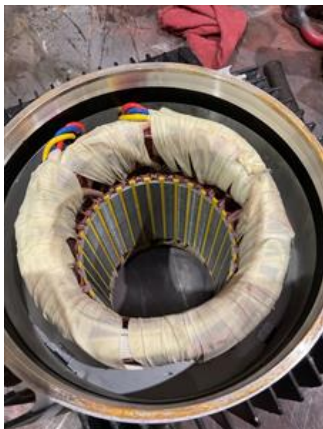
● 17. Does motor have internal fan?	(No) No
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18. Broken or Missing Components			missing coupling motor to pump. pump shaft broke
Initial Electrical Inspection			
19. Insulation Resistance/Megger			8029 Megohms
20. Winding Resistance			
1-2	1-3	2-3	
0.781	0.782	0.783	
	21. Perform Surge Test (P) Pass		



22. Number of Stator Slots	30
23. Stator Condition	



24. Stator Thermistors/Ohms	na
25. Stator Overloads/Ohms	na
Mechanical Inspection	
26. Drive End Bearing Brand	NSK

27. Drive End Bearing Number-

6308 ZZ



28. Drive End Bearing Qty.	1
29. Drive End Bearing Type	(Ball) Ball Bearing
30. Drive End Lubrication Type	(Grease) Grease Lubricated
31. Drive End Bearing Insulation or Grounding Device?	na
32. Drive End Wavy Washer/Snap-Ring Other Retention Device?	SNAP RING
33. Drive End Bearing Condition	



Normal wear

34. Opposite Drive End Bearing Brand	NSK
35. Opposite Drive End Bearing Number-	6208 ZZ

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36. Opposite Drive End Bearing Qty.	1
37. Opposite Drive End Bearing Type	(Ball) Ball Bearing
38. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
39. Opposite Drive End Bearing Insulation or Grounding Device?	Na
40. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	WAVY WASHER
41. Opposite Drive End Bearing Condition	



Normal wear

42. Drive End Seal	na
43. Opposite Drive End Seal	na


Rotor Inspection

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44. Rotor Type/Material

(Squirrel Aluminum) Squirrel
Cage Aluminum Die Cast



45. Growler Test	(Pass) Pass		
46. Number of Rotor Bars	26		
47. Rotor Condition	pass		
48. List the Parts needed for the Repair Below 1-6308ZZ bearing 2-6208ZZ BEARING			
49. Signature of Technician that Disassembled Motor	RW		
			
Mechanical Fits- Rotor			
50. Shaft Runout	0.0004 inches		
51. Rotor Runout			
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
Na			
52. Coupling Fit Closest to Bearing Housing			
0 Degrees	90 Degrees	120 Degrees	
1.4965	1.4965	1.4965	
53. Coupling Fit Closest to the end of the Shaft			
0 Degrees	60 Degrees	120 Degrees	
1.4965	1.4965	1.4965	
54. Drive End Bearing Shaft Fit			
0 Degrees	60 Degrees	120 Degrees	
1.5751	1.5751	1.5751	

55. Drive End Bearing Shaft Fit Condition

(P) Pass



56. Opposite Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

1.575

1.575

1.575

57. Opposite Drive End Bearing Shaft Fit Condition

(P) Pass



58. Shaft Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

Pass

Mechanical Fits- Bearing Housings

59. Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

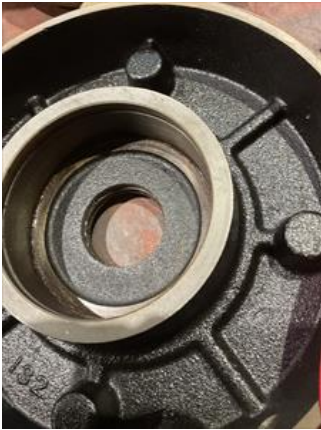
3.5443

3.5443

3.5443

60. Drive End - Endbell Bearing Fit Condition

(P) Pass



61. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

3.1499

3.1499

3.1499

62. Opposite Drive End - Endbell Bearing Fit Condition

(P) Pass



63. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

Na

64. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

Pass

65. List Machine Work Needed Below

None

66. Technician

RW



Co sign: CW

Root Cause of Failure

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67. Failure locations

Pump shaft broken and coupling missing



Pump shaft broken

68. Root cause of failure

Pump shaft broken at bottom end

Dynamic Balance Report

69. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

70. Initial Balance Readings

Drive End	Opposite Drive End

71. Final Balance Readings

Drive End	Opposite Drive End

72. Technician

Assembly

73. QC Check All Parts for Cleanliness Prior to Assembly

74. Photograph All Major Components prior to assembly

75. Final Insulation Resistance Test

76. Assembled Shaft Endplay

77. Assembled Shaft Runout

78. Test Run Voltage

Volts	Volts	Volts

79. Test Run Amperage

Amps	Amps	Amps

80. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

81. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

82. Ambient Temperature - Fahrenheit

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83. Drive End Bearing Temps - Fahrenheit		
5 Minutes	10 Minutes	15 Minutes
84. Opposite Drive End Bearing Temps - Fahrenheit		
5 Minutes	10 Minutes	15 Minutes
85. Document Final Condition with Pictures after paint		
86. Final Pics and QC Review		



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4. **BILLING AND PAYMENT TERMS.** Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
5. **DELIVERY OF GOODS AND/OR SERVICES.** Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
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8. **WARRANTIES.** Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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13. **FORCE MAJEURE.** Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earthquake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
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